

[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [66 FR 19850 4/18/2001]

[Docket No. 2001-SW-06-AD; Amendment 39-12181; AD 2001-08-04]

RIN 2120-AA64

Airworthiness Directives; Bell Helicopter Textron Inc. Model 205A-1, 205B, 212, 412, 412CF, and 412EP Helicopters

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD) for Bell Helicopter Textron Inc. (BHTI) Model 205A-1, 205B, 212, 412, and 412CF helicopters. That AD currently requires inspecting the locking washer on each main rotor actuator (actuator) for twisting or damage to the tab and replacing any locking washer that has a twisted or damaged tab. Replacing certain locking washers, regardless of condition, is also required within a specified time period. Installing a certain airworthy locking device on each actuator constitutes terminating action for the requirements of that AD. This amendment requires the same actions as the existing AD but adds the BHTI Model 412EP helicopters to the applicability. This amendment is prompted by the discovery that the BHTI Model 412EP helicopter was inadvertently omitted from the existing AD. The actions specified by this AD are intended to prevent an actuator piston from unthreading from its rod end, loss of control of the main rotor, and subsequent loss of control of the helicopter.

DATES: Effective May 3, 2001.

The incorporation by reference of certain publications listed in the regulations was previously approved by the Director of the Federal Register as of December 28, 2000 (65 FR 77780, December 13, 2000).

Comments for inclusion in the Rules Docket must be received on or before June 18, 2001.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Office of the Regional Counsel, Southwest Region, Attention: Rules Docket No. 2001-SW-06-AD, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. You may also send comments electronically to the Rules Docket at the following address: 9-asw-adcomments@faa.gov.

The service information referenced in this AD may be obtained from HR Textron, 25200 W. Rye Canyon Road, Santa Clarita, California 91355-1265, telephone (611) 702-5509, fax (661) 702-5970. This information may be examined at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Alfred Boutin, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Rotorcraft Certification Office, Fort Worth, Texas 76193-0170, telephone (817) 222-5157, fax (817) 222-5783.

SUPPLEMENTARY INFORMATION: On November 30, 2000, the FAA issued AD 2000-25-03, Amendment 39-12037 (65 FR 77780), to require, within 25 hours time-in-service (TIS), inspecting the tab on the NAS513-6 locking washer on all actuators, part number (P/N) 41105950, serial number with an “HR” prefix up to and including 490 and P/N 41000470, serial numbers with a prefix of “HR” up to and including 10010, for a twisted or damaged tab. P/N’s 41105950 and 41000470 were assigned by HR Textron, the manufacturer; the BHTI P/N’s are 205-076-036 and 212-076-005. Replacing any twisted or damaged locking washer with an airworthy NAS1193K6C locking device is required before further flight. Replacing any NAS513-6 locking washer with an airworthy NAS1193K6C locking device, regardless of the condition of the tab, is required within 100 hours TIS or at the next actuator overhaul, whichever occurs first. Installing an airworthy NAS 1193K6C locking device on all actuators constitutes terminating action for the requirements of that AD. That action was prompted by the discovery of a damaged locking washer. The damage to the locking washer was discovered when an operator experienced a problem with a collective control while attempting to take off. The collective control could not be moved upward from the full down position. Further inspection revealed that the lower piston of the actuator had unthreaded and separated from the lower rod end, causing the piston to make contact with the rod end support assembly and lodge against the rod end shank at an angle limiting any movement of the collective control. The collective servo cylinder assembly is used to provide irreversible collective control of the main rotor. Because the actuator end locking washer failed, the servo lower piston could rotate inside the lower servo head assembly and unthread itself from the rod end. That condition, if not corrected, could cause loss of control of the main rotor and subsequent loss of control of the helicopter.

Since the issuance of that AD, we discovered that we inadvertently omitted the BHTI Model 412EP helicopters from the applicability of the AD.

The FAA has reviewed HR Textron Alert Service Bulletin (ASB) No. 41000470-67A-05, Revision 1 and HR Textron ASB No. 41105950-67A-01, Basic Issue, both dated October 19, 2000, which describe procedures for inspecting and replacing certain locking washers. BHTI has issued ASB No.’s 205-00-79, 205B-00-33, 212-00-109, 412-00-105, and 412CF-00-12, all dated October 19, 2000, which include the applicable HR Textron ASB’s.

Since an unsafe condition has been identified that is likely to exist or develop on other BHTI Model 205A-1, 205B, 212, 412, 412CF, and 412EP helicopters of the same type designs, this AD is being issued to prevent an actuator piston from unthreading from the rod end causing loss of collective control and subsequent loss of control of the helicopter. This AD requires the same actions as the previous AD and adds the BHTI Model 412EP helicopters to the applicability. The actions must be accomplished in accordance with the ASB’s described previously. The short compliance time involved is required because the previously described critical unsafe condition can adversely affect the controllability of the helicopter. Therefore, the actions described previously are required at the specified time intervals, and this AD must be issued immediately.

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

The FAA estimates that 550 helicopters will be affected by this AD. It will take approximately 1 work hour to inspect the locking washer, 6 work hours per helicopter to replace the three locking devices on each helicopter, and the average labor rate is \$60 per work hour. Required parts will cost approximately \$20 per helicopter. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be \$209,000, assuming all the locking devices on all the helicopters are replaced without any inspections.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications should identify the Rules Docket number and be submitted in triplicate to the address specified under the caption "ADDRESSES." All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their mailed comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 2001-SW-06-AD." The postcard will be date stamped and returned to the commenter.

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, may be obtained from the Rules Docket at the location provided under the caption "ADDRESSES."

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by removing Amendment 39-12037 (65 FR 77780, December 13, 2000), and by adding a new airworthiness directive (AD), Amendment 39-12181, to read as follows:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "av-info.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2001-08-04 BELL HELICOPTER TEXTRON INC.: Amendment 39-12181. Docket No. 2001-SW-06-AD. Supersedes AD 2000-25-03, Amendment 39-12037, Docket No. 2000-SW-49-AD.

Applicability:

(a) Model 205A-1 helicopters with a hydraulic servo actuator (actuator), part number (P/N) 41105950, serial numbers with an "HR" prefix up to and including 490, installed, certificated in any category; and

(b) Model 205A-1, 205B, 212, 412, 412CF, and 412EP helicopters with an actuator, P/N 41000470, serial numbers with an "HR" prefix up to and including 10010, installed, certificated in any category.

Note 1: P/N 41105950 is the P/N assigned by HR Textron, the actuator manufacturer. Bell Helicopter Textron, Inc. (BHTI) has assigned P/N 205-076-036 to this part when fitted with a support mount. P/N 41000470 is the P/N assigned by HR Textron; BHTI has assigned P/N 212-076-005 to this part when fitted with a support mount.

Note 2: This AD applies to each helicopter identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For helicopters that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent an actuator piston from unthreading from its rod end, loss of control of the main rotor, and subsequent loss of control of the helicopter, accomplish the following:

(a) Within 25 hours time-in-service (TIS), inspect the tab on the NAS513-6 locking washer on each actuator for any twisting or damage in accordance with the Accomplishment Instructions, paragraph A., of HR Textron Alert Service Bulletin (ASB) No. 41000470-67A-05, Revision 1, dated October 19, 2000 or HR Textron ASB No. 41105950-67A-01, Basic Issue, dated October 19, 2000, as applicable to the affected actuator P/N. Replace any twisted or damaged locking washer with an airworthy NAS1193K6C locking device before further flight.

(b) Within 100 hours TIS or at the next actuator overhaul, whichever occurs first, replace the NAS513-6 locking washer on each actuator with an airworthy NAS1193K6C locking device.

(c) Installation of an airworthy NAS1193K6C locking device on each of the three actuators constitutes terminating action for the requirements of this AD.

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Rotorcraft Certification Office, Rotorcraft Directorate, FAA. Operators shall submit their requests through an FAA Principal Maintenance Inspector, who may concur or comment and then send it to the Manager, Rotorcraft Certification Office.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Rotorcraft Certification Office.

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the helicopter to a location where the requirements of this AD can be accomplished.

(f) The inspections and modifications shall be done in accordance with the Accomplishment Instructions, paragraph A., of HR Textron Alert Service Bulletin No. 41000470-67A-05, Revision 1 or HR Textron ASB No. 41105950-67A-01, Basic Issue, both dated October 19, 2000, as applicable to the affected actuator P/N. This incorporation by reference was previously approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51 as of December 28, 2000 (65 FR 77780, December 13, 2000). Copies may be obtained from HR Textron, 25200 W. Rye Canyon Road, Santa Clarita, California 91355-1265, telephone (611) 294-6000, fax (661) 259-9622. Copies may be inspected at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Note 4: BHTI ASB No.'s 205-00-79, 205B-00-33, 212-00-109, 412-00-105, and 412CF-00-12, all dated October 19, 2000, pertain to the subject of this AD and include the applicable HR Textron Alert Service Bulletins.

(g) This amendment becomes effective on May 3, 2001.

FOR FURTHER INFORMATION CONTACT: Alfred Boutin, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Rotorcraft Certification Office, Fort Worth, Texas 76193-0170, telephone (817) 222-5157, fax (817) 222-5783.

Issued in Fort Worth, Texas, on April 10, 2001.

Eric Bries, Acting Manager, Rotorcraft Directorate, Aircraft Certification Service.